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ABSTRACT

The results of an investigation of the relationship between the constructs of creativity and locus of control (LOC) in junior high school students are reported. Two hypotheses were studied: that creativity and internality would be positively correlated, and an intervention including creativity training would result in significant gains in the creativity and LOC scores of subjects in the experimental group. It was believed that if creativity and internal LOC were positively correlated, then gains in creativity as a result of creativity training would be paralleled by gains in internality. It was further believed that creative individuals possess an internal LOC, but having an internal LOC does not necessarily imply that the individual is also creative. The experimental group, selected from students enrolled in an Elementary and Secondary Education Act Title I program, participated in weekly sessions for a period of six months. These sessions included values clarification activities, decision making skills, and creativity training. Mednick's Remote Associates Test, the Nowicki-Strickland Personal Reaction Survey, and a projective story writing measure were administered as pre- and post tests to the experimental group and a control group of non-Title I students. Both hypotheses were supported by the preliminary data analysis. (Author/GDC)

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Creativity and Locus of Control in Junior High School Students

Philip M. Churchill

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Introduction

The purpose of this paper is to present preliminary results of a study investigating the relationship between the constructs of creativity and locus of control in junior high school students. The study consisted of two parts. First, it was hypothesized that creativity and internality would be positively correlated. Secondly, it was hypothesized that an intervention consisting in part of creativity-training would result in significant gains in the creativity and locus of control scores of subjects in the experimental group. It was believed that if creativity and internality were positively correlated, then gains in creativity as a result of creativity-training would be paralleled by gains in internality. It was further believed that creative individuals possess an internal locus of control, but having an internal LOC does not necessarily imply that the individual is also creative. In general, both hypotheses were supported by preliminary analysis of the data.

Background of the Problem

A central concern of this study was to establish a relationship between creativity and a measurable personality construct. The research and theory on creativity is divided into two antithetical schools of thought about the nature of the creative personality. On the one hand, there are the reductionist theorists (Freud, Adler, and Rank) who hold that creativity results from displacing and sublimating libidinal energy. According to psychoanalytical tradition, few people have this unique capacity. The self-actualizing theorists (Allport, Rogers, and Maslow), on the other hand, assume the creativity is an innate potential of man. They stress the need to understand and express oneself and the need to experience reality to its fullest. Everyone is or has the potential to be creative.

A major problem with such concepts as sublimation and self-actualization is that neither is suitable to direct measurement. The terms are loosely defined and interpreted by the respective theorists. One purpose, therefore, of this study was to determine whether Rotter's (1966) construct of locus of control offered adequate grounds to explain the underlying personality structure of creative individuals. Descriptions of individuals possessing an internal locus of control bear a noteable similarity to descriptions of creative persons.

Brief Review of the Literature on Locus of Control and Creativity

In a review of the literature, Rotter (1966) concluded that internal individuals 1.) are more alert to those aspects of their environment which provide useful information for future behavior; 2.) take steps to improve their environmental position; 3.) place greater value on skill or achievement reinforcements and are concerned with their abilities, particularly failures; and 4.) are resistant to subtle attempts to influence them. In another review, Strictland (1973) found that internal children utilize more information in their enviroment, have greater concept mastery, and persist at time-consuming and difficult tasks longer than external children.

In general, internals are characterized by self-motivation, autonomy, and competence. Hershe and Scheibe (1967) discovered that internals were better adjusted than externals and were more dominant, tolerant, concerned with good impressions, clever, efficient, egotistical, enthusiatic, independent, and self-confident. Kuypers (1972) concluded that internals were more coping, less defensive, and cognitively more complex than externals. Internals are less anxious (Joe, 1971; Hountras and Scharf, 1970; Watson, 1967) and less neurotic (Rotter, 1966). They are not dogmatic (Clanser

and Hjelle, 1970) or authoritarian (Rotter, Seeman and Liverant, 1962). Moreover, internals are more competent in developing problem solving strategies (Straits and Sechrest, 1963; James et. al., 1965; Hershe and Scheibe, 1967; Midlarsky, 1971; Burns, 1971). They are assertive (Phares, 1965), self-confident (Crowne and Liverant, 1963) and insightful (Tolor and Reznikoff, 1972).

Likewise, descriptions of creative individuals in the literature focus on traits of autonomy, self-motivation, task involvement, assertiveness, and competence. Creative people are more complex, make richer syntheses, and note their own impulses more (Barron, 1953). They are self-confident, dominant, and independent in their thinking (Bal, 1973). Myden (1969) described creative persons as inner-directed, sensitive, less conforming, and less prone to using repression. Rawls and Slack (1968) concluded that artists display more task involvement, introspective sensitivity, capacity for empathy, tolerance for change, and obsessive thinking than non-artists. Creative children are characterized by intense absorption in activities, looking closely at things, boldness of ideas, independent action, and a willingness to toy with new and strange ideas (Torrance, 1969). Holland (1961) concluded that creative out-put is more apt to occur among high school students who are independent, intellectual, expressive, asocial, consciously original and who possess high aspirations for future academic success.

While the above is not an exhaustive review of the locus of control or creativity literature, the similarities in descriptions of internal and creative individual seemed to suggest strongly that creativity and internality are related. Indeed, the few studies that have investigated the problem appear to support the contention of a relationship between the two variables. Cohen and Oden (1974) found partial corroboration for the

hypothesis. Their study revealed a significant, positive correlation for second grade girls, but not for boys. Ducette, Wolk, and Friedman (1972) found a positive correlation between internality and creativity for twenty white and twenty black 9 to 11 year old boys. Oziel (1972) discovered that internal college students do score creatively if placed in indirect command situations.

Problems Investigated and Design of the Study

On the basis of descriptions of internals and of creative individuals in the respective literatures and of results from studies that have investigated the problem, it seemed reasonable to hypothesize that creativity and internality are positively correlated. The study also investigated the hypothesis that an intervention consisting in part of creativity-training would result in parallel gains in creativity and internality for an experimental group. Significant gains in the variables would further validate the correlation.

An experimental group (N=63) was randomly selected from eight-hundred junior high school students receiving a Title I educational program. A control group (N=61) was randomly selected from a comparable group of four hundred students not receiving the Title I program. All of the subjects in the study attended the two junior high schools in the Peabody, Massachusetts, School System.

The experimental group received the intervention once a week for a six month period of time in lieu of regularly scheduled social studies classes. The intervention consisted of six activities on values clarification, eight on decision-making skills, and eleven on creativity-training. Five Title I interns presented the activities according to standardized lesson plans for each activity and according to a uniform sequence of

activities.

All twelve hundred students were pre and post-tested on two measures of creativity and one measure of locus of control. The instruments used were Mednick's Remote Association Test (RAT), an imaginative story written by the students in response to an ambiguous pictorial cue, and the Nowicki-Strictland Personal Reaction Survey (NSPRS). The three instruments are paper and pencil tests. Directions for each were printed on them and also read aloud.

Preliminary Results

Preliminary results suggest that there is a correlation between creativity and moderate internality. A t-test for the difference between independent means revealed that the experimental group performed significantly better than the control group at post-testing on all three instruments. (For the RAT, t=4.3576, df=33, significance was at the .001 level; for the creative story, t=2.7223, df=33, significance was at the .02 level; and for the NSPRS, t=2.3373, df=33, significance was at the .05 level.) A t-test for paired observations indicated that the experimental group gained significantly from pre-testing to post-testing on all three instruments. (For the RAT, t=8.4753; for the creative story, t=4.0343; and for the NSPRS, t=7.6002. With df=19, significance was at the .001 level.) For the control group, the t-test for paired observations revealed that the Creative Story and the NSPRS had significant losses. The RAT did, however, show significant gains at the .05 level.

Conclusions

Preliminary results support the two hypotheses under consideration in

this study. Although conclusions about the relationship between creativity and internality must be tentative until a complete analysis of the data has been performed, it is a particular importance at this point to note that gains in the experimental group occurred on the two measures of creativity and in the direction of internality on the measure of locus of control.

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